Record Nr. UNINA9910299052303321 Autore Pelekis Nikos Titolo Mobility Data Management and Exploration / / by Nikos Pelekis, Yannis **Theodoridis** New York, NY:,: Springer New York:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4939-0392-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (XV, 300 p. 157 illus.) 005.7 Disciplina Soggetti Database management Data mining Computer security **Database Management** Data Mining and Knowledge Discovery Systems and Data Security Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references. Nota di contenuto Part I: Setting the Scene -- Introduction -- Background on spatial data management and exploration -- Part II: Mobility Data Management --Modeling and acquiring mobility data -- Mobility database management -- Moving object database engines -- Part III -- Mobility Data Exploration -- Preparing for mobility data exploration -- Mobility data mining and knowledge discovery -- Privacy-aware mobility data exploration -- Part IV: Advanced Topics -- Semantic aspects on mobility data -- The case of big mobility data -- Part V: Epilogue-Hands-on -- Epilogue -- Hands-on with Hermes@OracleMOD --Hands-on with Hermes@PostgresMOD.

Sommario/riassunto

This text integrates different mobility data handling processes, from database management to multi-dimensional analysis and mining, into a unified presentation driven by the spectrum of requirements raised by real-world applications. It presents a step-by-step methodology to understand and exploit mobility data: collecting and cleansing data, storage in Moving Object Database (MOD) engines, indexing, processing, analyzing and mining mobility data. Emerging issues, such as semantic and privacy-aware querying and mining as well as

distributed data processing, are also covered. Theoretical presentation is smoothly interchanged with hands-on exercises and case studies involving an actual MOD engine. The authors are established experts who address both theoretical and practical dimensions of the field but also present valuable prototype software. The background context, clear explanations and sample exercises make this an ideal textbook for graduate students studying database management, data mining and geographic information systems.